

FIGURE 1

SCHEMATIC FLOWCHART OF:  
OPEN END MUTUAL FUND INDEX COMPUTER PROGRAM

GENERAL DATA PROCESSING COMPUTER SYSTEM: MEMORY STORAGE  
CONTAINS MASTER DATABASE OF OPEN END MUTUAL FUND STATISTICS  
PREFERRED SPECIFICATION OF COMPUTER: CDROM DRIVE, MONITOR  
HARD DRIVE CONTAINING 420 MEGABYTES 8 MEGABYTES RAM, 486 CPU

- FIGURE  
1A

ELIMINATE THOSE FUNDS IN MASTER DATABASE WHERE  
FUNDS ARE MARKED "NOT AVAILABLE FOR PURCHASE".  
PUT REMAINING FUNDS IN NEW DATABASE: "DATABASE #1"

- FIGURE  
1B

ELIMINATE ALL FUNDS IN DATABASE #1 WHERE  
ASSET SIZE IS NOT EQUAL TO "USER  
DEFINED" STORING REMAINING FUNDS IN NEW  
DATABASE: "DATABASE #2"

- FIGURE  
1C

SEARCH DATABASE "DATABASE #2" FOR THOSE  
FUNDS WHERE CATEGORY OF INVESTMENT STYLE  
="USER DEFINED" AND PLACE IN NEW  
DATABASE: "DATABASE #3"

- FIGURE  
1DFIGURE 1F  
↓

SEARCH DATABASE #3 AND SELECT  
FUNDS WHERE RISK OVER TIME  
(T) < AVERAGE OF ALL FUNDS IN  
DATABASE #3 WHERE TIME (T) =  
"USER DEFINED" AND RISK =  
"USER DEFINED". STORE SELECTED  
FUNDS IN NEW DATABASE NAMED:  
DATABASE #5

FIGURE 1F  
↓

SEARCH DATABASE #3; SELECT THOSE  
FUNDS WHERE RETURN OVER TIME (T) >  
AVERAGE OF ALL FUNDS IN DATABASE #3  
WHERE TIME (T) = "USER DEFINED" AND  
STORE IN NEW DATABASE NAMED:  
"DATABASE #4"

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COMBINE DATABASE "4" AND DATABASE "5" INTO NEW  
DATABASE NAMED: "INDEX"

- FIGURE  
1G

CREATE CONSTANT "NUMBER"; "NUMBER" = "USER  
DEFINED" TOTAL NUMBER OF OPEN END MUTUAL FUNDS  
TO BE INCLUDED WITHIN THE DATABASE "INDEX"

- FIGURE  
1H

CREATE CONSTANT NAMED "CALCULATION" WHERE  
"CALCULATION" = "USER DEFINED" CHOICE OF  
<EQUALLY PRICE WEIGHTED>, <CAPITALIZATION  
WEIGHTED>, <GEOMETRICALLY WEIGHTED>, OR  
<CUSTOM WEIGHTED>

- FIGURE  
1I

CREATE FORMULA: "OPTIMAL RISK/RETURN (T)"  
WHERE "OPTIMAL RISK/RETURN (T)" = "TOTAL  
RISK/RETURN(T)" - "TOTAL RISK/RETURN (T-1)"  
IF "TOTAL RISK/RETURN(T)" < "TOTAL  
RISK/RETURN T-1" THEN REPEAT UNTIL  
"TOTAL RISK/RETURN" YIELDS A GROUP OF  
FUNDS WHERE NUMBER = "NUMBER" AND NO OTHER  
COMBINATION OF FUNDS YIELDS A LOWER  
RISK/RETURN RATIO OVER TIME (T) AND NAME  
"FINAL INDEX"

- FIGURE  
1J

CREATE FORMULA "TOTAL RISK/RETURN" WHERE  
"TOTAL RISK RETURN" = SUM (TOTAL RISK FOR  
ALL FUNDS IN INDEX/TOTAL RETURN FOR ALL  
FUNDS IN INDEX) FOR TIME PERIOD (T)

- FIGURE  
1K

PRINT OUT A CHART OF "FINAL INDEX" FOR  
TIME (T). RETURN TO FIGURE 1A TO REPEAT

- FIGURE  
1L

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FIGURE 2

PROCESS FOR INTRA-DAY TRADING OF SECURITIZED  
OPEN END MUTUAL FUND,  
INDEX AND LINKED DERIVATIVE SECURITIES

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